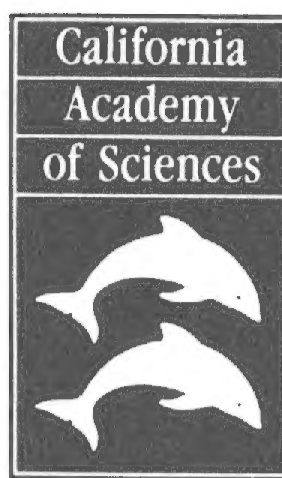


The ACADEMY NEWSLETTER

May 1987



Annual Open House Gives Members an Inside View of the Academy



Jim Patton

Mona Bourell explains how the Botany Department preserves its collection of 1.5 million plant specimens

The once-a-year opportunity to visit behind the scenes at the Academy of Sciences will be on **May 20 and 21** (Note: change of date) from 6:00 p.m. to 9:00 p.m. During this popular Open House Academy members can see what goes on above the tanks in Steinhart Aquarium, behind the stars in Morrison Planetarium, and under the microscopes in all eight research departments. The enormous research collections with millions of specimens representing a priceless treasure to the world's scientific community will provide a fascinating and unique look at the diversity of life on Earth. Insects, fish, frogs, plants, minerals, fossils, shells, and countless other specimens from around the world will be on display, and Academy staff will be on hand in each

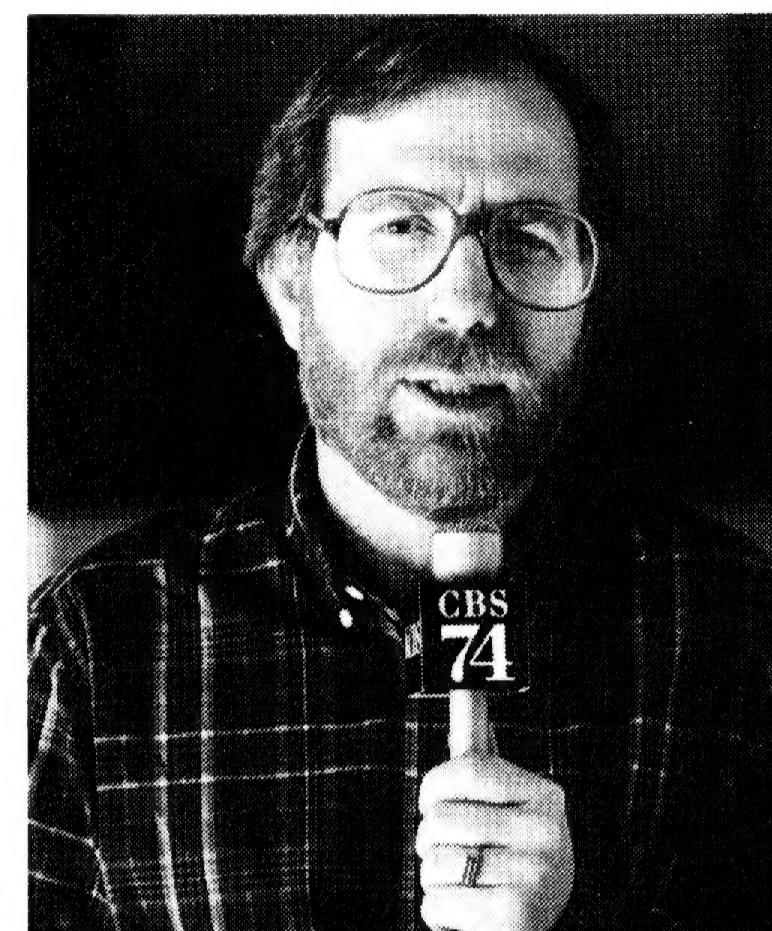
department to answer your questions.

Tour routes will also take members through the exhibits department and instrument shop where staff members use a wide variety of skills and the latest technology to create innovative temporary and permanent exhibitions.

Be sure to arrive early to allow enough time to visit all the departments. To avoid crowding, we ask that members whose last name begins with A-L come on Wednesday night if possible, and those whose name begins with M-Z come on Thursday night.

The June Members' Meeting will present George Sherman, a Mill Valley photographer specializing in photography of birds.

Science in Action on the Air and Now on Tape for Children



Susan Middleton

On February 28, 1983 a new radio feature called *Science In Action* blew across the airwaves on radio station KCBS. Now, four years later, 14 stations all over California with an audience numbering about one million enjoy the interesting two-minute bites of science information unearthed, recorded and edited by the show's producer, Jerry Kay. For the past three years the program has been funded by generous grants from the David and Lucile Packard Foundation and the Hewlett-Packard Foundation.

Over the years listeners have heard Academy scientists, Fellows and visiting researchers on topics ranging from why Mexican "beans" jump to what the loss of the tropical rain forests means to California farmers. The success of the short features led to an offer from KCBS for Kay to host a two-hour *Science In Action* show each Saturday night from 7 to 9.

Inspired by the success of the radio programs, the Academy is proud to announce yet another spin-off: the Science In Action Learning Series for children. Designed for grades three through six, each of the first three kits contains a book, a cassette tape, and a poster on sharks, earthquakes, or dinosaurs. These informative and entertaining kits are available through the Academy. See the last panel of this newsletter for information.

Science In Action! Live at the Academy



Susan Middleton

Science In Action, lively presentations about science by Academy staff members, has been presented since 1984 in the Academy Concourse. The program follows in the tradition set by the original Science In Action television show of the 50's and the current radio program which presents science topics in an informal, educational format. On any day at 1:30 a museum visitor might encounter a black-footed penguin, an embraceable boa constrictor, a rare bat-pollinated orchid, brilliant beetles from the Amazon Basin, or a demonstration on making arrow heads.

In 1985 Pacific Telesis Foundation granted funds to Science In

Action to purchase equipment and extend the programs to the weekends. An additional grant from the foundation in 1986 has now made it possible to build a permanent Science In Action stage. The new stage includes equipment that allows staff to broaden the scope of their presentations to include slides, videos, recorded sounds, and very small objects that can be projected from a microscope/camera onto a color television monitor. Science In Action, which has brought thousands of museum visitors together with scientists and their work, can be seen every day at 1:30 p.m. in the Academy Concourse, the main entrance hall of the museum.

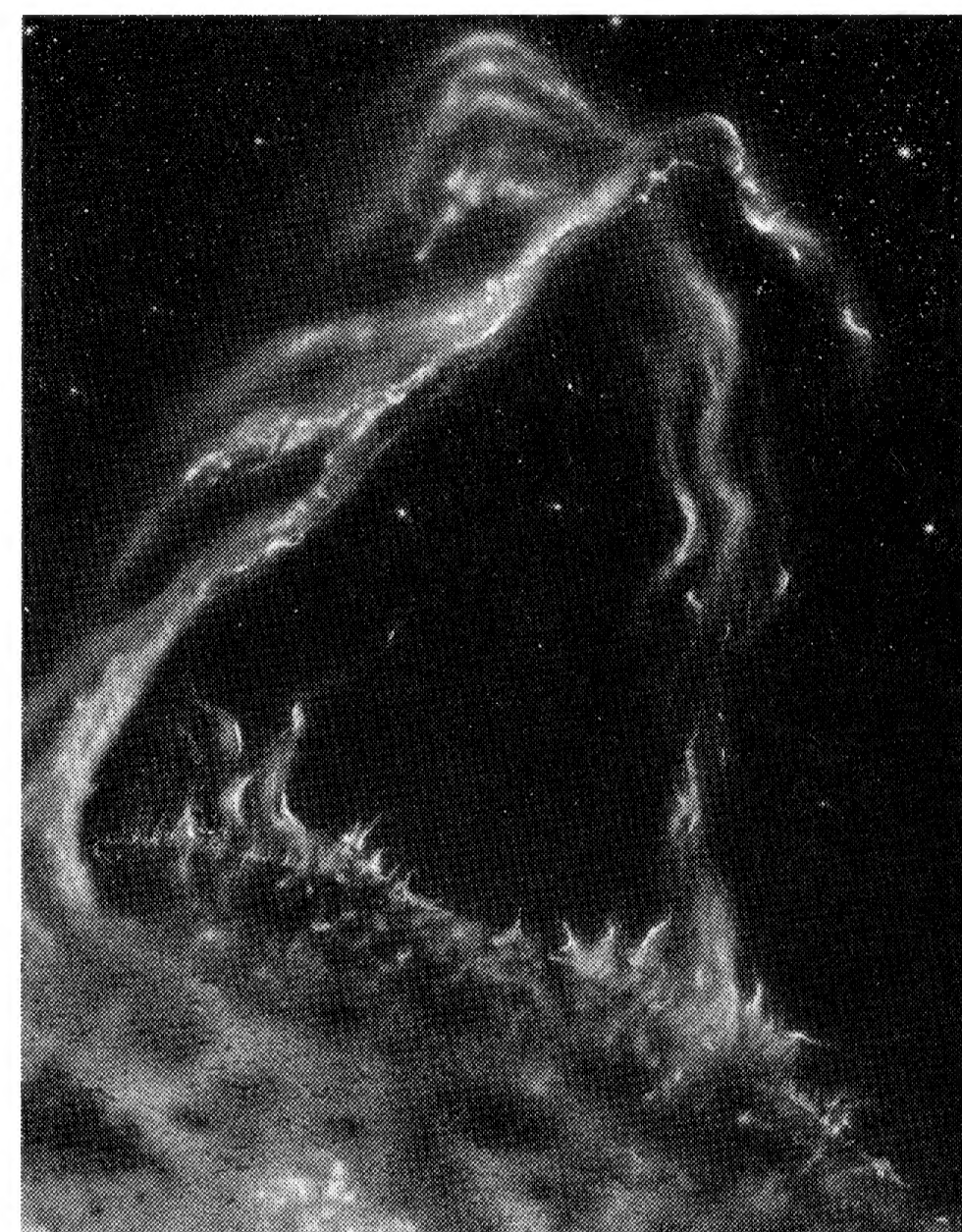
Golden Gateway to the Arts

Golden Gateway to the Arts is the theme of the 41st Annual Arts Festival that will be held on the Music Concourse in Golden Gate Park on May 2 and 3. Sponsored each year by the Arts Commission of San Francisco, the 1987 festival celebrates the 50th anniversary of the Golden Gate Bridge. Activities in the Music Concourse include opportunities for families to watch

theater games, performances, and demonstrations and to try their hands at art projects. Visitors to the Academy from noon to 3:00 p.m. can use their imaginations and some basic principles of entomology to create their own insect.

For more information about the festival call the Arts Commission at (415)558-3463.

Solar Voyage Takes off in Planetarium



The nearest star — our Sun — is the destination of "Solar Voyage," the current sky show in Morrison Planetarium. On this exploration of a place where the strongest metal would vaporize, the planetarium lecturer will consider the questions that man has asked throughout time. What is the nature of the Sun's energy? Can we ever harness its energy? And how long will it continue to warm the Earth? "Solar Voyage" can be seen daily at 1:00 p.m. on weekdays and 1:00, 2:00, 3:00 and 4:00 p.m. on weekends through June 21.

Members who wish to use their complimentary passes should check in at the Planetarium Box Office at least ten minutes before the show begins.

"Exploring the Skies of the Season" offers a look at the current night skies and tells what's up at this time of year. This is a great preparation for enjoying the beautiful stars that light the nights on summer camping trips. During May the constellation Virgo, containing an abundance of galaxies visible through medium-sized telescopes is prominent in the evening sky, along with the stars of Cancer, Leo, and Libra. "Exploring the Skies of the Season" is shown at noon on Saturdays and Sundays.

All planetarium shows are presented live and the lecturer is available after the show to answer questions about astronomy.

Living with Science, Living with God Available on Tape

The special program, "Living With Science, Living With God" held on March 19 was a wonderful success. An audience of 250 members and guests overheard and participated in a conversation about evolution, creationism, freedom of inquiry and the future of public education with Alan Jones, Dean of Grace Cathedral, William J. Bennetta, a Fellow of the Academy of Sciences, and Frank Talbot, Executive Director of the Academy. The participants and audience seemed charged with curiosity,

warmth and humor which has been recorded on audio and video tape for those who could not attend.

If you would like a copy of the audio cassette, please send a check for \$9; for a video cassette send \$35. The costs cover tax, postage, and handling. Send checks payable to the California Academy of Sciences to "Living With Science," Public Information Office, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118.

A Joyous Concert of Eastern European Music in Planetarium



Hatsegana, a talented trio of musicians, will bring out the gypsy in your soul in a concert on Tuesday, May 12 at 8:00 p.m. in Morrison Planetarium. The group will perform their favorite traditional instrumental and vocal music from the heart of the Balkans, Romania, Yugoslavia, and the Gypsy people of eastern Europe. Their repertoire includes folk melodies and contemporary eastern European music, all presented with energy and flair.

Tickets for Hatsegana are \$5 for Academy members and \$7 for

non-members and may be purchased by sending a check payable to the California Academy of Sciences with a self-addressed, stamped envelope to Morrison Planetarium, Academy of Sciences, Golden Gate Park, San Francisco, CA 94118. For information call (415)750-7127.

This is the final performance in the 1987 Spring concert series which has presented lively programs of music from around the world. The Fall Concert Series will begin in late September; be sure to watch for details in the newsletter.

Symposium on Marine Pharmacology Organized by the Academy

A two and a half day symposium on the "Biomedical Importance of Marine Organisms" will be held at the California Academy of Sciences April 30 through May 2.

Pharmaceuticals were initially derived from natural products, but those from marine sources have played only a minor role in most traditional pharmacopoeias. This has been changing during the past few decades, and now increasing attention of pharmacologists, physiologists, and natural product chemists is being directed to the marine realm. This timely symposium takes place while the first therapeutic substance derived from a marine animal is being tested in clinical trials, focusing attention on the sea as a source for pharmaceuticals.

This third biennial symposium by the Academy brings together internationally recognized professionals to discuss the history, practicality and future of developing drugs from marine sources and presents an opportunity for interested parties in science, government, and academe to share theories, technologies and hopes for the future.

The Academy with its archival collections and research activities in systematics, evolution, and biogeography is an especially appropriate venue for this meeting which emphasizes the biological aspects of marine pharmacology. Proceedings of this symposium will be published in "Memoirs of California Academy of Sciences."

Fees are \$25 for students, \$60 for members of the Academy, and \$75 for others. For a complete schedule of speakers and a registration form, call the Special Programs Office of the Academy at 750-7219.

There's Still Time To See Them!

Several temporary exhibits are closing soon. "Lifelong Safari" featuring the beautiful photography of Dr. Edward S. Ross can be seen only through May 3 and "Selections from the Collections" through May 10. Dr. Ross's work, including both his renowned close-up photography and portraits of the people and lands he has visited, attest to his lifetime of travels for his research in entomology. "Selections from the Collections" displays some of the fascinating artifacts and specimens from the Academy's research collections that have been gathered by scientists throughout its 134 year history.

LIGHTNING!

"Lightning!" will continue to delight visitors with its cartoon-style explanations of the physical forces that cause lightning. After generating their own mini-bolts and seeing waves of light follow their hands across a plasmasphere, visitors will not soon forget the power and beauty of this force which is vital to life on Earth. "Lightning!" will be in the Academy Concourse through July 26.

"Connecting Threads: Highlanders of Laos" in Lower Cowell Hall depicts in color photographs and text the life of the mountain peoples of Laos. Their delicate needlework in intricate patterns has made their handcrafts highly prized throughout the world. In conjunction with this exhibit the Ethnographic Gallery of the Academy Store contains some outstanding pieces of embroidery and applique produced by Laotian hill-tribes women now living in the Bay Area. "Connecting Threads" and the textile art in the Academy Store can both be seen through June 21.

Summer Travel Adventures

The Academy's travel program offers a chance to visit fascinating destinations around the world accompanied by an expert whose knowledge will add immensely to the enjoyment and memories of the trip.

The Rogue River Whitewater Adventure Leader: Jens Vindum, Herpetologist June 19-23

This is a camping and whitewater trip along the magnificent Rogue River in southern Oregon. The river, with its sparkling white water chutes and quiet swimming sections, winds through the richly forested Siskiyou Mountains. The wildlife is plentiful in this beautiful area — one may see deer, great blue herons nesting in the tree-tops, osprey diving for trout, bear scrambling along hillsides, and perhaps a shy river otter. There will be ample time to enjoy nature walks and informal lectures around the campfire. Participants should be in excellent physical condition and should enjoy sleeping out under the stars. Costs are \$575 plus transportation to Galice, Oregon.

The Academy Travel Office would be happy to answer questions about these expeditions; call (415) 750-7222.

Other 1987 Expeditions:

*Papua New Guinea
July 15-August 6
Leader: Dr. Pepper Trail*

*Coastal Maine and the Bay of Fundy
August 17-September 1*

*The Swiss and Italian Alps
August 21-September 6
(wait list only)
Leader: Dr. Frank Almeda*

*Archaeological Tour of Peru
September 15-29*

*Canyons of Time: A Tour to America's Southwest
September 20-October 3
Leader: Dr. Linda Cordell*

*India and Nepal
October 28-November 20*

*Oriental Odyssey: Burma and Thailand
November 2-24
Leader: Dr. Daphne Fautin*

Take a Closer Look at Nature

The Academy's Adult Education program offers a chance to get a new perspective on our world by seeing it through the eyes of experts. Become familiar with "The Natural History of Insects" with David Herlocker, who combines lecture, lab and two optional field trips to some of the Bay Area's diverse habitats to learn how to find, identify and preserve insects. The class meets on Mondays and Wednesdays from May 4 through 20; the cost is \$60 for members and \$70 for non-members.

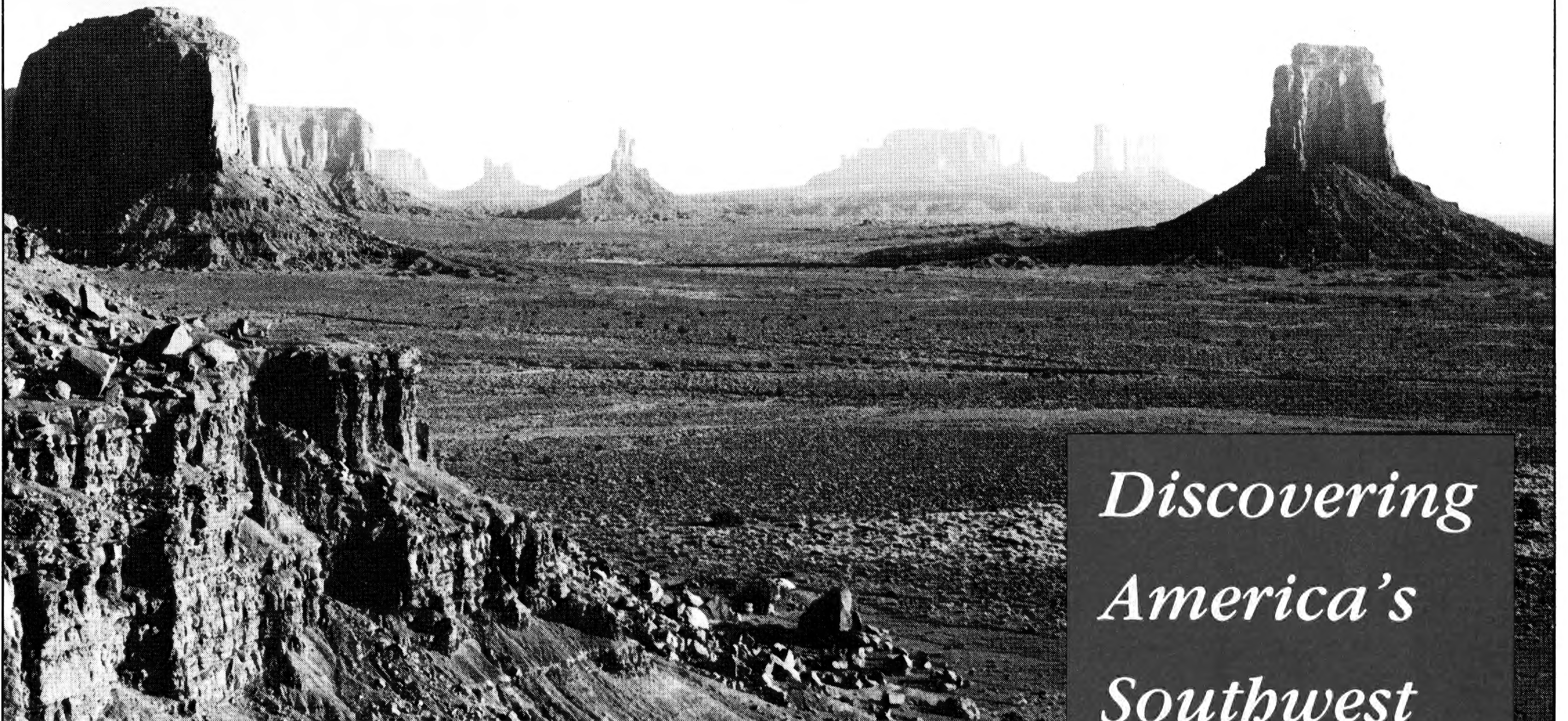
Animal behavior is the focus of the final class in the series "Biology of Mammals" on four Thursdays from May 7 through 28. Jim O'Brien and Becky Thomas will

discuss how to record and impartially interpret animal behavior. The cost is \$30 for members and \$40 for non-members.

Camera buffs will enjoy and benefit from a May 23-25 "Photography Workshop: Point Reyes National Seashore." Steve Johnson, whose work was featured in the Great Central Valley exhibition, will discuss how to capture landscapes and dramatic details on camera. The cost of \$195 for members and \$210 for non-members includes transportation, lodging, and several meals.

For information on these activities call the Education Department at (415)750-7100.

CANYONS OF TIME



Discovering America's Southwest

September 20-
October 3, 1987



Fly, drive, and boat in relative comfort through some of the most magnificent parts of the Four Corners region of America's Southwest.

Lectures by Academy Anthropologist Linda Cordell and by naturalist Steward Aitchison highlight the archaeology, history, geology, and flora and fauna.

Tour includes the Grand Canyon, the Hopi Second Mesa, Monument Valley, Canyon de Chelly, rafting on the San Juan River, Capitol Reef, Arches, and Canyonlands National Parks.

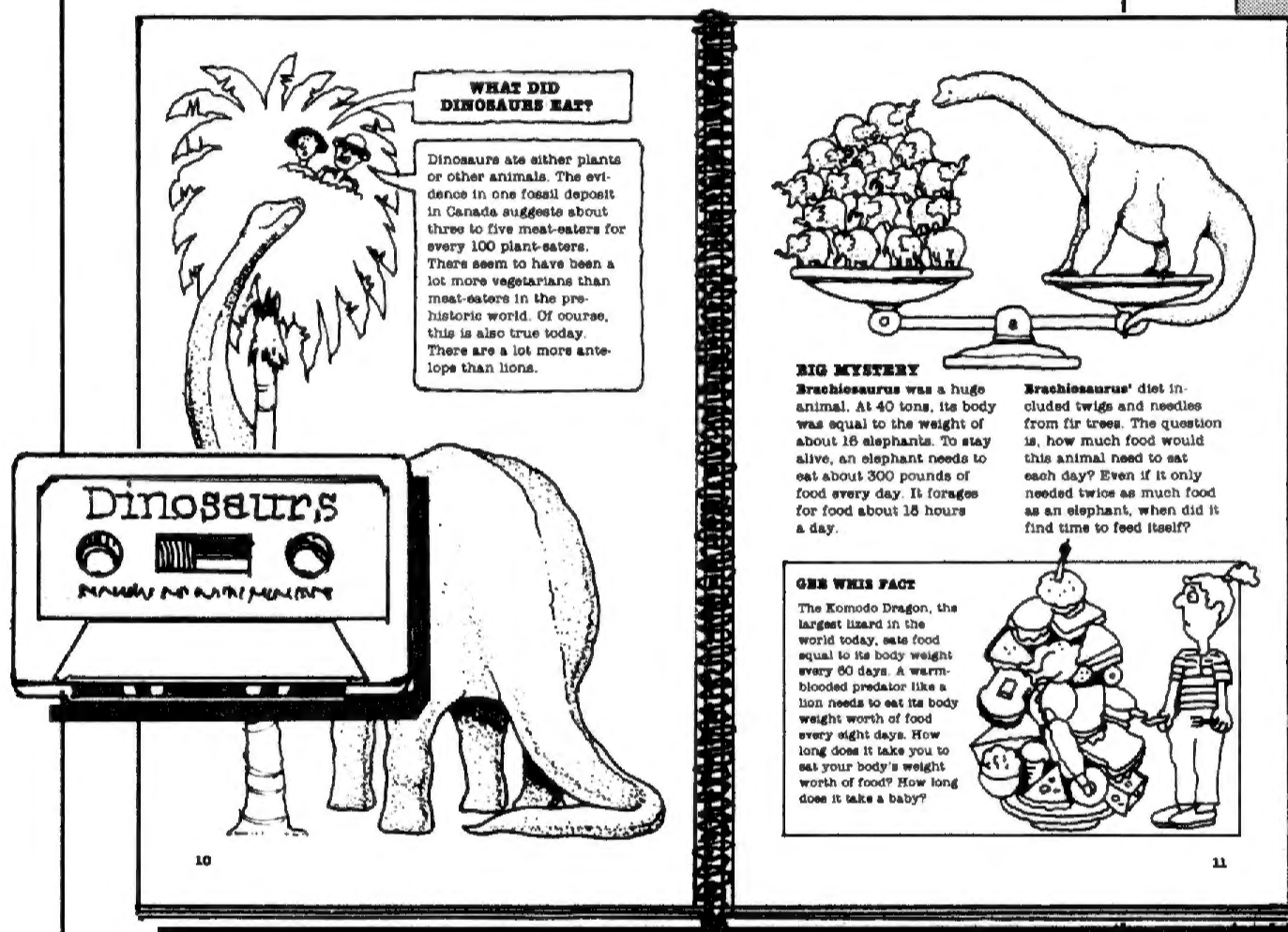
Cost is \$2400 per person plus air fare to Flagstaff, returning from Grand Junction.

For information and a brochure, please call the Academy Travel Office at (415) 750-7222.

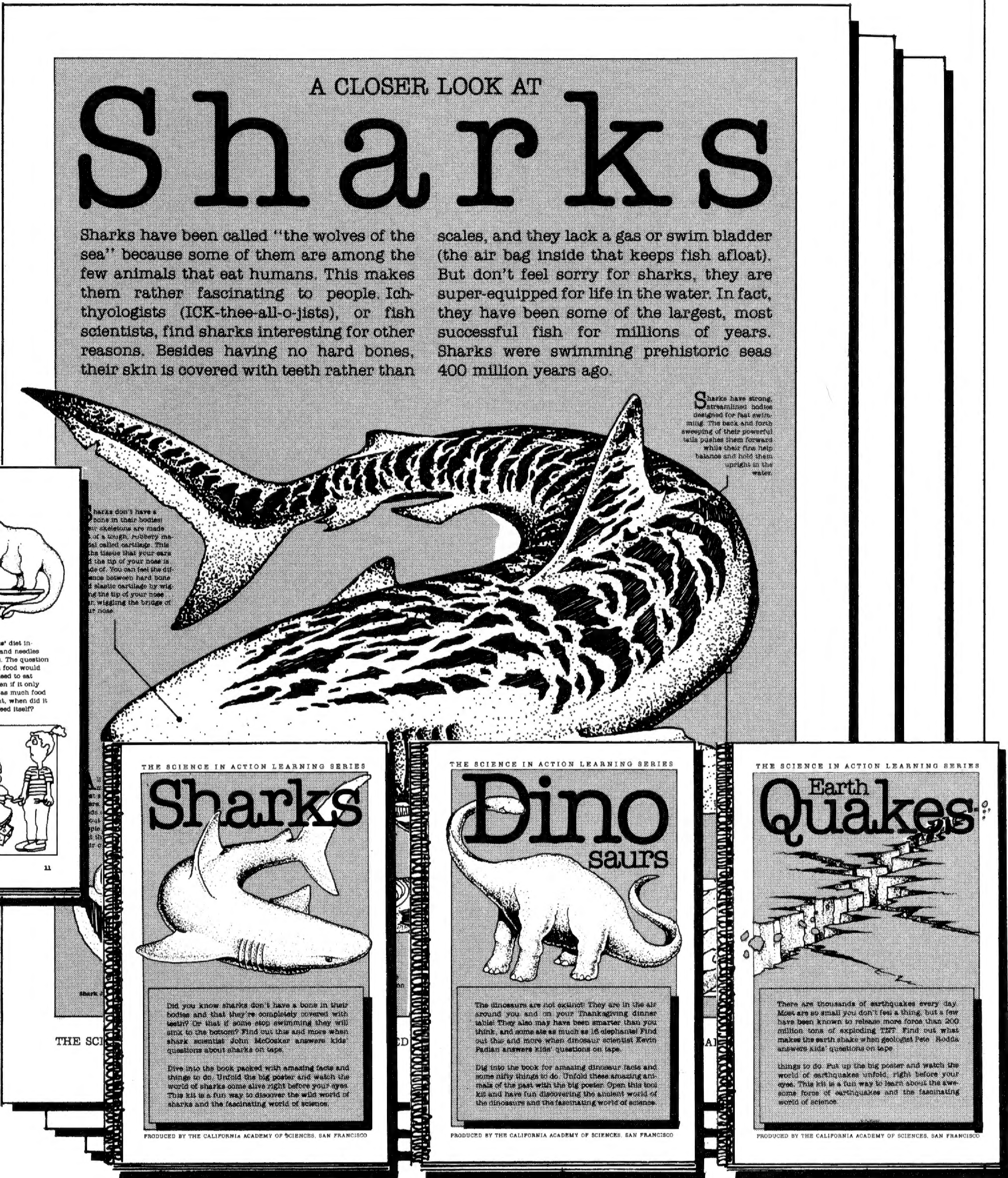
Teddy Roosevelt was so moved when he visited the Grand Canyon in 1903 that he praised it as "the one great sight which every American should see."

Now Available! Limited Edition! The Academy's Own
Science In Action Learning Series

Kids and the Academy have a lot in common including a love of sharks, dinosaurs and earthquakes! Now your children can take home part of the Academy with the new Science In Action Learning Series kit designed for grades 3 through 6. Each kit contains a 20-page book, an audio cassette and an illustrated 17" x 22" poster on one of three subjects; Sharks, Dinosaurs and Earthquakes. The books are chock full of interesting facts and activities and



the tapes include interviews with Academy scientists. The posters are great for framing, coloring or taking to school. These kits are fun for home, on trips or as gifts. Share the excitement of the Science In Action Learning Series. Order today, while supplies last.



Yes, I think your Learning Kits sound great and I would like to place an order!

Name _____

Address _____

City/State/Zip _____

Ship to: (if different from above!)

Name _____

Address _____

City/State/Zip _____

Send orders to:

California Academy of Sciences

Golden Gate Park

San Francisco, CA 94118

Attn: Science In Action

Please include street address for UPS delivery. Allow 4-6 weeks for delivery. Most orders shipped within one week.

Qty	Description	Amt.	Total
	Earthquakes	\$10.95	
	Sharks	\$10.95	
	Dinosaurs	\$10.95	
Subtotal			
6½ % Sales Tax			
Shipping & Handling			\$ 2.50
Total Enclosed			

Payment must accompany order. Method of payment:

☐ Check ☐ Money Order
☐ Visa/MasterCard Expiration Date _____
Card # _____
Name on Card _____

Traditional Arts at Home and Abroad



Thomas McDermott

Magical Moonshine Theater

The cultural heritages of many lands are celebrated by the weekly traditional arts programs. Every Saturday at 1:00 p.m. in Wattis Hall the folkways of peoples from around the world are shared with museum visitors by demonstrations of native music, dance, or handcrafts. The programs, which are funded by a grant from the Paul L. and Phyllis Wattis Foundation, are offered free to museum visitors after the normal admission charge.

May 2 — In honor of *Cinco de Mayo*, the Ballet Folklorico Mestizo (a performing group of children) presents a colorful program of Mexican regional dances from Jalisco, Vera Cruz, Chiapas, and Nayarit.

May 9 — Jeanetta Ife Sanders expresses her Afro-American heritage in the form of soft, fabric sculpture dolls with painted, porcelain faces. Jeanetta exhibits her dolls and explains the process of reproducing ceramic faces from molds.

May 16 — Br'er Rabbit and his friends, transplanted in the New World from their African origins, have become well-known characters in Afro-American folk tales. The Magical Moonshine Theater presents its puppet version of these humorous stories with enchanting three-foot-tall rod puppets.

May 23 — The Dogwatch Nautical Band will "haul her aloft" with rousing sea shanties reminiscent of the days of sail. Rooted in the oral traditions of maritime folklore, "Chanties" were work songs synchronizing the rhythm of the sailors' chores, to ensure that the crew "all pull together, lads!"



May 30 — Stonecarver Ling Larsen, from Copenhagen, Denmark, works within the framework of Medieval European sculpture yet his pieces are personal symbolic statements. Using hammer and chisel, Mr. Larsen demonstrates stonecarving techniques on marble, soapstone, and granite.

Carnaval for Young Audiences!

Brazilian and Caribbean *carnaval* comes alive to the beat of a drum on Sunday, May 31 at 1:00 p.m. This spirited program is offered for youngsters and their families by Young Audiences of the Bay Area. The drum group CARIBE will begin with a simple description of the history, geography, and culture of Latin America, and then demonstrate various percussive techniques and styles. Student participation is encouraged. The Cuban *rumba*, Brazilian *samba*, and Puerto Rican *bomba* will bring the joy and rhythms of Latin America to all listeners.

Young Audiences of the Bay Area, Inc. is funded by the McKesson Foundation, Inc. The programs are offered free after the regular admission charge to the museum.

Laserium Entertains the Entire Family

Laserium light shows offering a spectacular kaleidoscope of laser lights moving to the rhythms of a wide variety of music make an enjoyable outing for the entire family. Shows featuring four different styles of music are offered in Morrison Planetarium on Thursday through Sunday evenings. "Rainbow Cadenza" with timeless classical favorites; "Lites Out" featuring jazz and fusion; "Pink Floyd II" playing music from several hit albums; and "Laser-Space" presenting new age and visionary music are currently offered in live presentations using the latest sound and laser technology. For details on show times call (415) 750-7138

Golden Gate Park
San Francisco, California 94118-9961
(415) 221-5100

Open every day of the year
from 10 until 5



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San Francisco

May Opens New Doors to Discovery

30 April - May 2 Marine Pharmacology Symposium

2 Traditional Arts — Mexican dances 1:00 p.m.

3 Last day of "Lifelong Safari"

9 Traditional Arts — Afro-American dolls 1:00 p.m.

10 Last day of "Selections from the Collections"

16 Traditional Arts — tales of Br'er Rabbit 1:00 p.m.

20 Open House 6:00 p.m. — 9:00 p.m.

21 Open House 6:00 p.m. — 9:00 p.m.

23 Traditional Arts — sea shanties 1:00 p.m.

30 Traditional Arts — stonecarving 1:00 p.m.

31 Young Audiences — South American *carnaval*
music



*Science In Action can be seen daily at 1:30 p.m.
in the Academy Concourse*

Looking Ahead to June

10 Members' Meeting —
The American Southwest

11 Members' Meeting —
The American Southwest